A Legacy for Life

Discoveries made by generations of UW-Madison vitamin researchers literally changed the world.

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Through the decades, scientists at UW-Madison have made many remarkable discoveries — among them, how fish find their way back to their spawning grounds, how antibiotics can be mass produced, how butterflies create wings, and how synthetic genes are made.

But in one area Wisconsin scientists have consistently excelled, leaving us a legacy of vastly improved health, the extirpation of disease, and an understanding of the components of diet that make our bones strong and give our bodies the ability to ward off what were once common diseases.

The story of vitamins — their discovery, how they are produced, and their impact on human and animal health — is a remarkable chronicle rooted in the agricultural traditions of nineteenth century Wisconsin. The tale continues today in a handful of UW-Madison labs, where the remaining mysteries of these essential compounds are yielding to the increasing technical power of modern science.

But the story of vitamins is not simply one of noteworthy scientific discovery. In many ways it also reflects the history of the university itself and, some would say, is inseparable from the developments that forged UW-Madison into an international research powerhouse. The plot is fleshed out by singular and sometimes eccentric characters who, while demonstrating their genius in the lab, engaged variously in politics, philanthropy, and business.

The scientific discoveries made by the predecessors of today's UW-Madison vitamin researchers literally changed the world. By finding and then elucidating the roles of some vitamins in human health, pellagra and rickets — chronic and debilitating ailments that once afflicted tens of millions of people in this country alone — disappeared in a flash. The eradication of rickets in the 1920s was described in one popular account as "a public health victory as complete as any in history."

Like the showman that he was, Karl Paul Link, the inventor of Warfarin, stands before a poster proclaiming the virtues of his novel rat poison. Acting as an antagonist to the blood-clotting properties of vitamin K, Warfarin also served as an important blood-thinning drug. It was secretly administered to President Dwight D. Eisenhower after he suffered a heart attack in 1955.

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